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The Department of Labor and Industries has adopted newly rewritten and clarified requirements relating to Hearing Conservation in non-agricultural industries. This rulemaking is part of our four-year plan to rewrite for clarity all of our general occupational safety and health rules. This project provides additional flexibility for employers in some situations. We have identified several reference changes that have been updated with this rulemaking. The following was adopted:

- The hearing conservation requirements from chapter 296-62 WAC were renumbered in chapter 296-817 WAC.
- The rule was reorganized and rewritten to improve clarity.
- References to consensus standards were updated to equivalent requirements in current consensus documents.
- Program options are provided for employers with short-term (less than one year) employees. These program options can be used in place of employer provided audiograms.
- References to chapters 296-54 WAC, 296-56 WAC, 296-59 WAC, 296-62 WAC, 296-155 WAC, 296-304 WAC and 296-305 WAC were updated.

The department renumbered the sections of this rule since the 102 filing to make the numbering consistent with the style of the rest of the clear writing projects.

The department received public comment on the following sections and modified the proposed amendments to these sections as indicated below. All other sections proposed for amendment did not receive comment and are adopted as proposed.

NEW CHAPTER:

Chapter 296-817 WAC, Hearing Loss Prevention (Noise). Reason for Adopting Rule:

• Created this chapter and incorporated all the noise requirements in this one chapter.

Comment Received Relating to this Chapter:

Specifically to WAC 296-817, I'm confused as to why under the heading, "Noise," it begins with "Hearing Loss Prevention Program." That's implying that everything that follows it, essentially the entire standard, is part of the Hearing Loss Prevention Program. This is different from the existing standard that clearly delineates many of the requirements, much of what's discussed about the standard from the Hearing Conservation Program, which is what the employer must clearly do. This change is confusing, and it seems to be anything but plain language. I'm further confused by the use of hearing loss prevention terminology when, in fact, WISHA has for at least 20 years and, as far as I know, the rest of the nation and territories use the term "Hearing Conservation Program." This is a familiar term known by Safety, Industrial Hygiene, and other interested parties, as well as employees for a good many years. The changing of it just invites confusion.

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Department Response to Comment:

Historically, noise controls and hearing protection have not been presented as part of the hearing conservation program. These requirements existed prior to the Hearing Conservation Amendment and continued to be handled separately within the structure of the rule. However, these are integral parts of an employer's ongoing efforts and therefore can easily be considered program elements. In the proposed standard we have taken this approach and presented all of the requirements as part of an overall program.

The department feels that "hearing loss prevention" better describes the goal of this rule and has adopted this term. It is expected that employers with limited background in safety issues, will better understand this language. Although this term has not been used extensively, it did not originate with this rule and has been used by NIOSH, AIHA, NHCA, and several influential authors in the field of occupational noise.

Changes to the Rule (Proposed rule versus rule actually adopted):

• The title of this chapter was change to "Hearing Loss Prevention (Noise)".

NEW SECTION:

WAC 296-817-100, Scope. Reason for Adopting Rule:

- Created this section and inserted revised language from WAC 296-62-09015. No new requirements have been added.
- Added a table explaining "Noise Evaluation Criteria".

Comment Received Relating to this Section:

In the scope, the second bullet down, it says --"Make sure employees exposed to noise are protected." These goals are accomplished by:" -- I would suggest changing that to, "These goals may be accomplished by."

Department Response to Comment:

These actions are mandatory and the use of the word "may" would imply otherwise. We assume the comment is addressing the fact that even taking these actions might not fully protect employees from hearing loss. This will be discussed in non-codified tools provided to employers.

Comment Received Relating to this Section:

"Protecting employees from noise exposure by using feasible noise controls that do not rely primarily on individual employee behavior" -- I would change that to "Protecting employees from excessive noise exposures by using feasible --" and the term, "feasible" and "feasibility" are used several times in the standard. This is not defined.

Department Response to Comment:

The word "feasible" does not have a special meaning in this standard. However, further guidance on noise controls will be provided for employers. Noise can contribute to hearing loss at levels that are considered quite moderate to some people. Adding the word "excessive" may be misleading.

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Comment Received Relating to this Section:

Noise Evaluation Criteria – In the column for the Criteria of 90 dBA TWA it states that the requirement is to perform Noise Controls. It is suggested that the addition of hearing protection be added to that square, as it is present in all other required areas. This is of particular importance if the Noise Control measures are unsuccessful.

Department Response to Comment:

90 dBA TWA₈ is greater than 85 dBA TWA₈, thus all requirements of the lower standard apply when exposures equal or exceed 90 dBA TWA₈. We agree with the comment that consequences of this may not be obvious to some people not familiar with noise measurement, so a note to the effect that all requirements triggered at 85 dBA TWA₈ are also required at 90 dBA TWA₈ was added.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-010.
- This section was proposed as "Summary and scope". Changed title to "Scope" and moved the summary to WAC 296-817-200.
- Deleted the phrase "that do not rely primarily on individual employee behavior" from the 4th bullet.
- Replaced the word "above" in the table to read, "whose exposure equals or exceeds" for consistency.
- After "noise controls" in the table added the following language for clarity "and hearing protection, training, audiometric testing."

NEW SECTION

WAC 296-817-200, Summary Reason for Adopting Rule:

 Created this section and inserted revised language from WAC 296-62-09015. No new requirements have been added.

Comment Received Relating to this Section:

Clarify the following section titles to read as, "Your Responsibility:

To prevent employee hearing loss by minimizing, and protecting them providing protection from, noise exposures

WAC 296-817-01010

Make sure employees use hearing protection when exposed to noise exposures greater than or equal to 85 dBA TWA₈

WAC 296-817-01020

Make sure warning signs are posted for areas with noise levels at or above 115 dBA

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Department Response to Comment:

The department agrees with this change. Based on the several comments about the language relating exposure criteria we have revised the proposal to use consistent language throughout. Wherever there is a requirement triggered by a specific criteria level the language is now "equals or exceeds." Enforcement of these requirements is based on statistically significant evidence of exposure above the level specified.

Comment Received Relating to this Section:

Under the "Summary and scope, Your Responsibility:" -- it currently reads, "To prevent employee hearing loss by minimizing and protecting them from noise exposures." I would add, "excessive noise exposures."

Department Response to Comment:

Noise can contribute to hearing loss at levels that are considered quite moderate to some people. Adding the word "excessive" may be misleading. Specific requirements of the standard are all associated with minimum noise exposures.

Comment Received Relating to this Section:

"Make sure employees use hearing protection when exposed to noise exposures greater than 85 dBA TWA₈." Some employers, or some employees will have noise exposures exceeding 50 percent noise dose at less than 85 dBA. These are employees who typically work longer than eight-hour shifts.

Department Response to Comment:

An exposure of "85 dBA TWA₈" is the same as a "50 percent noise dose" referred to by the commenter and is consistent with the current requirements of the standard.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-010.
- Changed all the WAC section numbers to reflect correct numbers.
- Changed titles of WAC 296-817-20010 and 296-817-20025.

NEW SECTION:

WAC 296-817-20005, Conduct employee noise exposure monitoring. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09019, 296-62-09021, 296-62-09024 and 296-62-09025. No new requirements have been added.

Comment Received Relating to this Section:

The standard also allows representative sampling.

Department Response to Comment:

We agree with this comment. An additional line will be added to the standard "Representative monitoring may be used where several employees perform the same tasks in substantially similar conditions."

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Comment Received Relating to this Section:

Not required to use "C" scale. Linear response can also be used. Also, drop the identification of type of instrumentation as it adds nothing to the parenthetical explanation and appears to add a requirement for use of that type of instrumentation to measure the particular type of noise.

Department Response to Comment:

Linear response is not a reliable measure of noise levels because it will vary between meters. To provide a consistent standard, C-weighting is given as part of the criteria specification and is used as part of department enforcement practice. Linear response will always provide readings greater than the C-weighted reading, so employers choosing to use linear response measurements will be in compliance with the standard if hearing protection is provided for employees exposed above 140 dB-linear.

Comment Received Relating to this Section:

The standard does not specify a time period, and it is not feasible when conducting large-scale noise surveys to provide this feedback to employees in such a short time period. The notification of employees exposed at or above 85 dBA TWA within 5 working days is highly unlikely. If the noise level collection were performed by an outside vendor the ability to report the results to the workers would most likely occur after 5 days. It is recommended that a 15-day notification may be more feasible.

Department Response to Comment:

RCW 49.17.220(3) requires prompt notification of exposure results to employees. We are adopting 5 days as a consistent interpretation of this legal obligation in all WISHA rules. It is intended that the five days start with the receipt of results by the employer, not the date of monitoring so we are adding the following phrase "of when you receive the results". It should also be noted that an employer does not have 5 days to provide protection to their employees with noise exposures at or above 85 dBA TWA₈, this must be done immediately.

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Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-01005.
- Add a note that reads, "Representative monitoring may be used where several employees perform the same tasks in substantially similar conditions."
- In the note replaced the word "above" with "which equal or exceed" for consistency.
- In the note deleted the word "possible".
- Corrected a reference in the second bullet.
- In the third bullet, replaced "exposed at or above" with "whose exposure equals or exceeds" for consistency.
- In the third bullet added the following language, "Exposure levels for selection of hearing protection".
- In the fifth bullet, replaced "exposed at or above" with "whose exposure equals or exceeds" for consistency.
- In the fifth bullet, added the following language at the end of the bullet, "of when you receive the results".
- In the sixth, replaced "exposed at or above" with "whose exposure equals or exceeds" for consistency.

NEW SECTION:

WAC 296-817-20010, Control employee noise exposures that equal or exceed 90 dBA TWA₈". Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09026. No new requirements have been added.

Comment Received Relating to this Section:

The addition of a notes section outlining feasible means to engineer or administer out noise would be beneficial.

Department Response to Comment:

Additional information will be provided with the standard. Additional notes will be added to indicate appropriate control types and provide some direction related to enforcement priorities.

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Comment Received Relating to this Section:

Under 296-817-01010, "Reduce noise where employee exposures are at or above 90 dBA TWA8, You must:" -- the second bullet, Use controls that do not rely primarily on individual employee behavior to reduce noise exposures. This is not plain language. This is unclear. I believe they mean using hearing protection devices, but it certainly can be made clearer.

The proposed standard reads, wherever 90 dBA TWA8 exceeded -- "use control methods that do not rely primarily on individual employee behavior to reduce noise exposures." This is a substantial change from the current standard we have now. The current standard reads, "Wherever employee noise exposures equal or exceed TWA₈ 90 dBA, feasible, administrative, or engineering controls shall be utilized." Obviously, with the proposed language, we're removing the feasible administrative controls from the standard. We feel this is a substantial increase in cost in just trying to comply with the standard. In some trades, the use of earplugs, earmuffs are about the only way to satisfy the requirements of the proposed standard. Switching directly to engineering controls could increase the cost of complying, like I said before, with some of the standard, especially in construction or other mobile industries, I don't have the facilities in which to encapsulate a noisy item, for instance.

Department Response to Comment:

We agree that this is unclear and have reviewed the current requirements in more detail. We have revised this requirement to simply require reduction of noise exposure. A note has been added to explain that hearing protection is not a control to reduce exposure. Additional notes will be added to indicate appropriate control types and provide some direction related to enforcement priorities.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-01010.
- Changed the title of section from "Reduce noise where employee exposures are at or above 90 dBA TWA₈" to "Control employee noise exposure that equal or exceed 90 dBA TWA₈".
- Deleted the language in this section and replaced with the following,

"Important:

Hearing protection provides a barrier to noise and protects employees but is not considered a control of the noise hazard. Separate requirements apply to hearing protection and are found in WAC 296-817-20015.

You must

• Reduce employee noise exposure, using feasible controls, wherever exposure equals or exceeds 90 dBA TWA₈.

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Note:

- Once noise exposures are brought below 90 dBA TWA₈, no further reduction is required. However, further reduction of noise may reduce the need for other hearing loss prevention requirements.
- Controls that eliminate noise at the source or establish a permanent barrier to noise are typically more reliable. For example:
 - · Replacing noisy equipment with quiet equipment
 - · Using silencers and mufflers
 - · Installing enclosures
 - Damping noisy equipment and parts
- Other controls and work practices may also be useful for reducing noise exposures. Examples include:
 - · Employee rotation
 - · Limiting use of noisy equipment
 - · Rescheduling work"

NEW SECTION:

WAC 296-817-20015, Make sure employees use hearing protection when their noise exposure equals or exceeds 85 dBA TWAs. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09031, 296-62-09033 and 296-62-09053. No new requirements have been added.

Comment Received Relating to this Section:

Change title of this section to "Make sure employees use hearing protection when exposed to noise exposures greater than or equal to 85 dBA TWA8."

Department Response to Comment:

Based on the several comments about the language relating exposure criteria we have revised the proposal to use consistent language throughout. Wherever there is a requirement triggered by a specific criteria level the language is now "equals or exceeds." Enforcement of these requirements is based on statistically significant evidence of exposure above the level specified.

Comment Received Relating to this Section:

Only required to identify those exposed above 115 dBA.

Department Response to Comment:

The current standard does have requirements for noise "at or above 115 dBA". (See WAC 296-62-09031 and WAC 296-62-09039) Enforcement of these requirements is based on statistically significant evidence of exposure above the level specified.

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Comment Received Relating to this Section:

Not required to use "C" scale. Linear response can also be used. Also, drop the identification of type of instrumentation as it adds nothing to the parenthetical explanation and appears to add a requirement for use of that type of instrumentation to measure the particular type of noise.

Department Response to Comment:

The current standard does not define the use of linear response sound level meters. Although the proposed standard references appropriate standards for this requirement, linear response can vary considerably between sound level meters depending on the microphone and electronic performance. C-weighted response is relatively consistent and repeatable and was therefore chosen as the standard for compliance. Linear response will result in higher readings than C-weighting and employers who elect to use linear response sound level meters will be in compliance with the rule.

The instruments identified are the minimum requirement for compliance. Although an audio dosimeter could be used in place of a sound level meter in some cases, the audio dosimeter would need to meet the sound level meter requirements for this to be a valid technique.

Comment Received Relating to this Section:

Add the following language, "The selection must include at least two distinct types (such as earplugs (foam, molded, and/or custom-molded), earcaps, or earmuffs) for each exposed employee and must be sufficient to cover:..."

Department Response to Comment:

The listing of hearing protection types was chosen to be consistent with the current standard and enforcement policy. The current use of these terms in industry varies some from this list and we have provided a note to encourage employers to follow what is considered to be current best practice.

Comment Received Relating to this Section:

Selection recommendations for hearing protection addressing individual concerns, although the inclusion of hearing ability and communication needs would be an added benefit to the list.

Department Response to Comment:

The changes in this section were based on current enforcement practice. Although best practice would involve the additional points given by the commenter, these changes would go beyond the scope of this rule project.

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Comment Received Relating to this Section:

While it is certainly desirable that the employee requests listed below be considered during selection, the standard does not have this requirement.

"Consider requests of the employees regarding:

- Physical comfort
- Environmental conditions
- Medical needs
- Communication requirements"

Department Response to Comment:

The current standard requires a selection of *suitable* hearing protectors. The criteria given in the proposed standard are those that have been used by the department in enforcing the requirement for suitability. Hearing protection must be worn to be effective and employee acceptance of the hearing protection is important in ensuring that it is worn.

Comment Received Relating to this Section:

Under WAC 296-817-01015, there is a note at the bottom of the bullets that says, "Hearing protector selection should include earplugs, earcaps and earmuffs." I would delete this note as redundant to what has just been discussed in the earlier bullets.

Department Response to Comment:

The list in the section lists multiple distinct types of earplugs. The note is recommending that employers specifically include earcaps and earmuffs and not rely on two types of earplugs.

Comment Received Relating to this Section:

Recommend the following language change, "Make sure all hearing protection is sufficient to reduce the employee's equivalent 8-hour noise exposure to less than 85 dBA or less. When using the A-weighted exposure measurements, reported as "dBA TWA8", the reduction in noise exposure by hearing protectors is given by Table 3:"

Department Response to Comment:

We agree with this comment.

Comment Received Relating to this Section:

The example given with a protector that has an NRR of 20dB is adequate, however, if you use the same formula with a protector with a higher NRR, the amount of noise reduction may be exaggerated.

NRR 30 - 7dB = 23dB effective protection – reducing a 95 dBA TWA to 72 dBA TWA The industry wide accepted derating for the NRR is 50% - which field studies indicate to be a more realistic approach to determining effective protection.

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Department Response to Comment:

This example was simply chosen to illustrate basic compliance. We will provide additional examples for employers in the companion documents to this rule. The adjustments given in the proposed standard are for the use of A-weighted data with the NRR (which is based on C-weighted data). We do not endorse derating of hearing protection. Derating is used to address incorrect selection, improper fit, and poor training. Each of these conditions represents a violation of the standard and we do not consider increasing the protection rating of the hearing protector to be an appropriate abatement of these violations.

Comment Received Relating to this Section:

The standard does not address use of dual hearing protection, so addition of this procedure constitutes an additional requirement.

Department Response to Comment:

The proposed standard reflects department enforcement policy as given in the WISHA Technical Manual.

Comment Received Relating to this Section:

Under "Effective Protection of Hearing Protectors," Type of hearing protection, Effective program, Table 3, "In addition to protection based on daily noise dose, make sure hearing protection has an NRR of at least 20 dB when exposures involve noise greater than or equal to 115 dBA (slow response sound level meter) or 140 dBA (fast response sound level meter)" I would suggest deleting this confusing paragraph. The hearing protection devices must reduce the TWA8 to below 85 dBA. This is currently not addressed in the standard and is therefore a new requirement. Also, the NRR specified does not appear to provide the same level of protection as the "equivalent 85 dBA TWA8" requirement above. This would seem to allow an equivalent exposure of 103dBA TWA8 in a 116 dBA environment, while a 114 dBA environment would require hearing protection offering an NRR of 36 in order to get to the equivalent 85 dBA8 requirement (assuming an 8 hour exposure in each case). It would also seem to allow exposure to over 28000 impact/impulse noise peaks with a sound pressure level at the eardrum of 120 dB or more in the course of a shift.

Department Response to Comment:

The current standard requires hearing protection whenever noise exposure exceeds 115 dBA for continuous noise or 140 dBC for impulsive noise, but does not provide specific direction on the hearing protection to use when those exposures represent an 8-hour time weighted average of less than 85 dBA. Department practice has been to require substantial hearing protection, such as dual protection, in these cases. The proposal provides a specific standard for hearing protection to be used.

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Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-01015
- Changed the title of section from "Make sure employees use hearing protection when exposed to noise exposures greater than 85 dBA TWA₈ to "Make sure employees use hearing protection when their noise exposure equals or exceeds 85 dBA TWA₈."
- In the first bullet, replaced "exposed at or above" with "exposure equals or exceeds" for consistency.
- Changed the table number from "3" to "2".
- In the sixth bullet, deleted "less than" and added "or less".
- In the seventh bullet, replaced "greater than or equal to" with "that equals or exceeds" for consistency.

NEW SECTION:

WAC 296-817-20020, Make sure exposed employees receive training about noise and hearing protection. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09035 and 296-62-09037. No new requirements have been added.

Comment Received Relating to this Section:

Training is the key element to an effective hearing loss prevention program. It is recommended that training guidelines as to medium used and length of time for training be outlined. The use of a 5-minute video that changes every year is not necessarily sufficient in preventing hearing loss in persons exposed to hazardous noise levels.

Department Response to Comment:

These comments would represent an increase in requirements that is beyond the scope of the current project.

Comment Received Relating to this Section:

The standard does not require that this information be provided to employees during training. This is a new requirement. If this requirement is retained, it should be located within section 296-817-040.

Department Response to Comment:

This comment is specific to information on auditing of hearing protection. The auditing process is voluntary on the part of the employer, but if they choose to use audits as part of their program it is important that employees understand the purpose of the audits. This element of training is included here so that employers can refer to the one section on training and be assured that they have met the full requirements of the standard.

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Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-01020
- In the first bullet, replaced "exposed to noise at or above" with "whose noise exposure equals or exceeds" for consistency.
- In the second bullet, replaced "at or above" with "that equals or exceeds" for consistency.
- Corrected a reference in the fourth bullet.

NEW SECTION:

WAC 296-817-20025, Make sure warning signs are posted for areas where noise levels equal or exceed 115 dBA. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09039. No new requirements have been added.

Comment Received Relating to this Section:

Change title of section to "WAC 296-817-01025, Make sure warning signs are posted for areas with noise levels at or above 115 dBA"

Department Response to Comment:

Based on the several comments about the language relating exposure criteria we have revised the proposal to use consistent language throughout. Wherever there is a requirement triggered by a specific criteria level the language is now "equals or exceeds." Enforcement of these requirements is based on statistically significant evidence of exposure above the level specified.

Comment Received Relating to this Section:

Revise language to read, "Make sure warning signs are posted at the entrances or boundaries of all well-defined work areas where employees may be exposed to noise at or above 115 dBA (measured using a sound level meter with slow response)."

Department Response to Comment:

The parenthetical statement clarifies the requirement for general employers who may not be aware of the technical requirements of noise measurement.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-01025
- Changed the title of this section from "Make sure warning signs are posted for areas with noise levels above 115 dBA" to "Make sure warning signs are posted for areas where noise levels equal or exceed 115 dBA."
- In the first bullet, replaced "at or above" with "that equals or exceeds" for consistency.

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NEW SECTION:

WAC 296-817-20030, Arrange for oversight of audiometric testing. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09027. No new requirements have been added.

Comment Received Relating to this Section:

The Council for Accreditation in Occupational Hearing Conservation (CAOHC) refers to the individual responsible for reviewing and overseeing the audiometric testing as a Professional Supervisor. They also provide training for this role.

There are references to an individual responsible for overseeing the audiometric data and reviewing audiograms. It would be helpful to make these references consistent. WAC 296-817-01030 the individual is referred to as a qualified reviewer and in WAC 296-817-03020 the individual is called the health care professional supervising audiograms. Professional Supervisor or Program Supervisor would be an appropriate distinction and consistency would add to clarity.

Department Response to Comment:

We have reviewed this issue and found that this term is not currently well defined or in wide use. Including the term could help clarify the rule, but would only be used a few times. We do not feel that the term is useful at this point.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-01030
- Corrected a reference in the first bullet.

NEW SECTION:

WAC 296-817-20035, Identify and correct deficiencies in your hearing loss prevention program. Reason for Adopting Rule:

 Created this section and inserted revised language from WAC 296-62-09015. No new requirements have been added.

Comment Received Relating to this Section:

An audiometric test provides information about an individual's hearing ability. It can indicate a progressive hearing loss that may be noise related. By itself, however, it will not provide adequate information to determine program deficiencies. Revise language to read, "Use audiometric testing to identify hearing loss, which may indicate program deficiencies".

Department Response to Comment:

The department agrees with this change.

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Comment Received Relating to this Section:

This constitutes a new requirement. The standard defines the appropriate actions to be taken on discovery of an STS in 296-62-09027(8). Those actions should be listed here to avoid confusion over what actions are to be taken.

Department Response to Comment:

Reviewing noise exposure monitoring and noise controls are not specifically listed in the current standard, however, both actions are necessary to establish the level of protection needed for review of hearing protection. Note that the current standard requires review of noise monitoring whenever there is an indication of increased exposure. Where an employee has experienced hearing loss, one reasonable explanation is that noise has increased above the previously measured levels.

Comment Received Relating to this Section:

Under 817-01035, "Identify and correct deficiencies in your hearing loss prevention program." One of the bullets says, "A deficiency is indicated when any employee experiences measurable hearing loss indicated by a standard threshold shift." Just yesterday, I talked to an employer who described many employees with STSs of 10 dBA that did not exist upon -- or that did exist upon retesting but did not exist a year later, and the baseline actually reduced, and a year later, it further reduced. This is a very, very fine threshold, and it does not necessarily indicate the deficiency in the hearing loss prevention program.

Department Response to Comment:

We are revising this language in response to another commenter. While an STS does not prove the employer's hearing loss prevention program is faulty, it is an indicator of potential deficiencies and is an appropriate criteria for requiring the employer to review their program and make appropriate corrections.

Comment Received Relating to this Section:

As written, this requirement does not reflect the requirements in the standard for actions when a standard threshold shift is found (WAC 296-62-09027(8)), and is adding new requirements.

Department Response to Comment:

Review of noise exposures and controls are not specifically mentioned in the audiometric testing section of the current standard, but must be reviewed when there is an indication of increased noise, which would be the case with an STS. Review of hearing protection should also be based on accurate monitoring and proper use of controls.

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Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-01035
- Modified language in the first bullet to read, "Use audiometric testing to identify hearing loss, which may indicate program deficiencies."
- In the second bullet, replaced the word "is" with "may be".
- Corrected a reference in the second bullet.
- In the third bullet, deleted "and conduct additional monitoring as necessary".
- In the third bullet, deleted "and make appropriate corrections or adjustments".
- Corrected references in the reference note.

NEW SECTION:

WAC 296-817-20040, Document your hearing loss prevention activities. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09041. No new requirements have been added.

Comment Received Relating to this Section:

The deleted phrase, "...and for as long as you rely upon them to determine employee exposure" is not addressed by the standard and constitutes an additional requirement.

Department Response to Comment:

Employers are required to maintain current information on noise exposure, even when that information is more than two years old. The current standard's language is misleading by indicating that these records must be maintained for a minimum of two years.

Comment Received Relating to this Section:

The documentation of audits is addressed in WAC 296-817-04020, and inclusion of audits out of context here is a source of confusion regarding the requirement for, and documentation of, audits to comply with this standard.

Under 01040, "Document your hearing loss prevention activities," it talks about maintaining the hearing protection audits, if you choose to rely upon them for the duration of employment of the affected employees. These audits will not typically be based upon single employees but rather a number of employees whose duration of employment vary widely and may become indefinite, and it's very difficult, if not impossible, to keep records on that basis.

Department Response to Comment:

Audits are only specifically required where the employer chooses to conduct an audit for employees hired for less than one year who are not provided audiometric testing. Employers will therefore be able to discard all audit records after one year.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-01040
- In the note, replaced the word "standard" with "chapter".

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NEW SECTION:

WAC 296-817-300, Summary. Reason for Adopting Rule:

• Created this table of contents/summary page relating to noise measurement and computation. No new requirements have been added.

Comment Received Relating to this Section: N/A Department Response to Comment: N/A

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-020
- Changed all the WAC section numbers to reflect correct numbers.

NEW SECTION:

WAC 296-817-30005, Make sure that noise-measuring equipment meets recognized standards. Reason for Adopting Rule:

Created this section and inserted revised language from WAC 296-62-09021 and 296-62-09023. No new requirements have been added.

Comment Received Relating to this Section:

Revision dates of the ANSI standards referenced should be retained as listed in the current standard. Modification to more current versions of the standards may introduce significant new requirements for employers to comply with. If there have in fact been no changes to the requirements in these standards through their revisions, the older version is equivalent anyway.

Department Response to Comment:

By updating references to the current ANSI standards it is possible to address the use of the new technologies introduced over the past 30 years. Most of these new equipment features are not necessary for compliance with the current rule and in some cases we have added language to make that clear or provide a more precise explanation of how these features can be used.

Comment Received Relating to this Section:

Not required to use "C" scale. Linear response can also be used.

Department Response to Comment:

Linear response is not consistent between sound level meters. C-weighting provides a more precise definition of the requirement. Linear response will result in higher measurements and therefore employers using linear response instead of C-weighting will be in compliance with the standard.

Changes to the Rule (Proposed rule versus rule actually adopted):

• Proposed as WAC 296-817-02005

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NEW SECTION:

WAC 296-817-30010, Measure employee noise exposure. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09019. No new requirements have been added.

Comment Received Relating to this Section:

The standard only requires that noise between 80 and 130 dBA be used in the computation of employee noise exposure, and does not address what noise sources must be measured. Delete the following language,

"You must

Include all:

workplace noise from equipment and machinery in use,

other noise from sources necessary to perform the work;

noise outside the control of the exposed employees."

Department Response to Comment:

The noise range of 80 to 130 dBA is a specification of the audio dosimeter required in the standard. The requirements for sound to be included is based on department enforcement policy under the current standard. The current standard does not limit noise sources to be measured in any way.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-02010
- Corrected a reference in the note.
- Replaced the word "above" in the table to read, "whose exposure equals or exceeds" for consistency.
- After "noise controls" in the table added the following language for clarity "in addition to the requirements for 85 dBA TWA₈"

NEW SECTION:

WAC 296-817-30015, Use these equations when estimating full-day noise exposure from sound level measurements. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09055. No new requirements have been added.

Comment Received Relating to this Section: N/A Department Response to Comment: N/A

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-02015
- Changed the table number from "2" to "3".
- Corrected the equations.

January 27, 2003 Public Hearing - Noise Adoption: May 20, 2003

NEW SECTION:

WAC 296-817-400, Audiometric testing – Summary. Reason for Adopting Rule:

• Created this table of contents/summary page relating to audiometric testing. No new requirements have been added.

Comment Received Relating to this Section:

It states the following under "your responsibility": To conduct audiometric testing of employees exposed to noise to make sure that their hearing protection is effective. It is recommended that the wording "make sure that their hearing protection is effective" be replaced with "to monitor hearing ability and assess means to improve the effectiveness of the hearing loss prevention program".

Department Response to Comment:

We agree that the commenter's language is more technically rigorous, but expect the proposed standard language will be better understood by employers.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-030.
- Changed all the WAC section numbers to reflect correct numbers.
- Changed title of WAC 296-817-40025.

NEW SECTION:

WAC 296-817-40005, Provide audiometric testing at no cost to employees. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09027. No new requirements have been added.

Comment Received Relating to this Section: N/A

Department Response to Comment: N/A

Changes to the Rule (Proposed rule versus rule actually adopted):

• Proposed as WAC 296-817-03005.

NEW SECTION:

WAC 296-817-40010, Establish a baseline audiogram for each exposed employee. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09027. No new requirements have been added.

Comment Received Relating to this Section:

Note: For employers using mobile test services, is there to be no stipulation for a hearing protection audit sometime during the year?

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Department Response to Comment:

This would be an increase in requirements.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-03010.
- In the first bullet, replaced "at or above" with "that equal or exceed" for consistency.
- In the first bullet corrected a reference.

NEW SECTION:

WAC 296-817-40015, Conduct annual audiograms. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09027. No new requirements have been added.

Comment Received Relating to this Section:

Excellent explanation of why testing anytime during shift is a good practice.

Department Response to Comment:

Thank you.

Comment Received Relating to this Section:

Suggested language change to read, "You must

Make sure each employee is informed of the results of his or her audiometric test include whether or not there has been a hearing level decrease or improvement since their previous and/or baseline test."

Department Response to Comment:

It is expected that the individual conducting the audiometric testing, who may not have access to the complete audiometric test records, would typically handle this task.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-03015.
- In the first bullet, replaced "at or above" with "that equals or exceeds" for consistency.

NEW SECTION:

WAC 296-817-40020, Review audiograms that indicate a standard threshold limit. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09027. No new requirements have been added.

Comment Received Relating to this Section:

Suggested language change to read, "You must

- Make sure the Professional Supervisor has
 - A copy of this chapter
 - The original baseline audiogram, the most recent audiogram, and any revised baseline audiograms of the employee to be evaluated."

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Department Response to Comment:

The review of the audiometric record that is specified in this rule only requires the baseline audiogram (which would be the most recent revised baseline) and the current audiogram. Although the reviewer can provide the employer with a better analysis using a more complete record, it is not necessary for compliance with the rule.

Comment Received Relating to this Section:

"Make arrangements for the reviewer to communicate to the employee any medical conditions that are found unrelated to your workplace. This information is confidential and must be handled appropriately". Is this a new requirement? This language is a new regulation, and I don't disagree with the intent, but this has never been in the program prior to this.

Department Response to Comment:

The current standard requires employees to be informed about medical pathologies found during testing and review. The handling of this information falls under the WISHA access to records standard and medical ethics rules and must be kept confidential.

Comment Received Relating to this Section:

"Obtain an opinion from the health care professional supervising audiograms as to whether the audiograms indicate possible occupational hearing loss and any recommendations for changes in hearing protection." The current standard does not have this requirement. This is a new requirement.

Department Response to Comment:

This action is necessary to comply with the illness recording requirements in Chapter 296-27 WAC and is also necessary to ensure that appropriate corrections are made to the employers hearing loss prevention program.

Comment Received Relating to this Section:

WAC 296-817-03020 indicates making "arrangements for the reviewer to communicate to the employee any medical conditions that are found unrelated to your workplace" Would wording such as "communicate to the employee any suspected medical conditions that may be unrelated to the workplace" be more appropriate as the reviewer is not attempting to make a medical diagnosis? Additionally, the wording related to this information being confidential and handling it appropriately is not completely clear-does this mean that the employer should not have access to this part of the employee notification?

Department Response to Comment:

We agree with this comment and have made the suggested wording change. The information being handled is confidential medical information and should not be accessible people other than medical personnel. The information may need to be kept by the employer, particularly if the reviewer also works for them, but should be maintained in a confidential manner under direct control of the medical staff.

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Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-03020.
- In the fifth bullet, add the word "suspected".

NEW SECTION:

WAC 296-817-40025, Keep the baseline audiogram without revision, unless annual audiograms indicate a persistent threshold shift or a significant improvement in hearing. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09027. No new requirements have been added.

Comment Received Relating to this Section:

It is recommended that the guidelines be outlined for the revision of baselines, as outlined by the National Hearing Conservation Association.

Department Response to Comment:

The use of these guidelines is left to the discretion of the medical professional reviewing the audiograms and the choice to use these guidelines would not change the actions of the employer.

Comment Received Relating to this Section:

Revise the baseline – Making this mandatory is new. The standard allows this to be done at the discretion of the audiologist or physician reviewing audiograms. This is a new requirement.

Department Response to Comment:

We agree with this comment and that the intention of the requirement is to prohibit revision of the baseline until an audiologist or physician finds that it is appropriate. The item has been revised to reflect this.

Comment Received Relating to this Section:

Would it be more appropriate to include the word "persistent" as well, in referring to revising the baseline due to significant improvements over the baseline i.e. "The hearing threshold shown in the annual audiogram indicates significant persistent improvement over the baseline audiogram"?

Department Response to Comment:

This is left to the professional opinion of the reviewer.

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Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-03025.
- Changed the title of this section from "Keep the baseline audiogram without revision, unless annual audiograms indicate a persistent threshold shift or a significant improvement in hearing" to "Not revise the baseline unless annual audiograms indicate a persistent threshold shift or a significant improvement in hearing."
- In the first bullet, changed the language to read, "Keep the baseline audiogram without revision, unless annual audiograms indicate a persistent threshold shift or a significant improvement in hearing".

NEW SECTION:

WAC 296-817-40030, Make sure a record is kept of audiometric tests. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09041. No new requirements have been added.

Comment Received Relating to this Section:

Revise the language to read as,

"Retain a legible copy of all employee audiograms conducted under this chapter."

Make sure the audiogram includes:

- •Name & job classification of the employee
- Date of the audiogram
- Audiometric data
- The examiner's name
- Date of the last calibration of the audiometer
- Employee's most recent noise exposure
- Retain a legible copy of the background SPLs in audiometric test rooms."

Department Response to Comment:

The commenter's proposed language is redundant. The audiogram is the audiometric data and the additional information here does not necessarily need to be kept in the same record as the audiogram. For example, employee exposure assessments are often kept separately from the audiograms—although they are valuable information for those reviewing audiograms and do need to be available. Having the background noise levels in the test rooms as a separate item was a typographical error in the current standard.

Changes to the Rule (Proposed rule versus rule actually adopted):

• Proposed as WAC 296-817-03030.

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NEW SECTION:

WAC 296-817-40035, Make sure audiometric testing equipment meets these requirements. Reason for Adopting Rule:

• Created this section and inserted revised language from WAC 296-62-09029. No new requirements have been added.

Comment Received Relating to this Section:

Revise the language to read,

"Perform the following audiometer calibrations:

The functional operation of the audiometer must be checked before each day's use by testing a person, or acoustic simulator, with known, stable hearing thresholds, and by listening to the audiometers output to make sure that the output is free from distorted or unwanted sounds. Deviations of 10 dB or greater must require an acoustic calibration.

Use of a Bioacoustic simulator, such as the Tremetrics "Oscar" prior to each day's use will also satisfy this requirement and should be allowed. Recommend that language be added to explain this.

Department Response to Comment:

We agree with these suggestions.

Comment Received Relating to this Section:

Revise the language to read, "Provide audiometric test rooms that <u>meet</u> the requirements of ANSI S3.1-1999 American National Standard Maximum Permissible Ambient Noise Levels for Audiometric test Rooms except that ambient noise levels at 500 Hz must be 26 dB or less."

Daily checks are not mandatory for a fixed base operation, only if the environment is variable from day to day/location to location.

Include a table with the allowable levels.

Department Response to Comment:

We agree with this suggestion.

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Comment Received Relating to this Section:

Revision dates of the ANSI standards referenced should be retained as listed in the current standard. Modification to more current versions of the standards may introduce significant new requirements for employers to comply with. If there have in fact been no changes to the requirements in these standards through their revisions, the older version is equivalent anyway.

The standard does not specify the type of headphones used, and this constitutes a new requirement.

Relating to "superaural headphones" – shouldn't this be "supra-aural"? In addition, does this portion of the requirement exclude the use of insert earphones? What about situations where there is concern that inaccurate thresholds are being obtained due to collapsing ear canals? If inserts are not allowed, what alternative is allowed to obtain accurate threshold data?

Department Response to Comment:

The ANSI standard referenced in the current rule does not have provisions for anything other than supra-aural headphones. By referencing the current ANSI we can clarify that these are the appropriate devices to be used. Testing under this rule is a screening procedure and needs to be done in a repeatable and easily available format. If the audiologist or physician reviewing the audiograms specifies additional testing, that testing may use any available clinical technology.

Comment Received Relating to this Section:

Relating to the requirement of the ambient noise levels to be at or below 26dB at 500 Hz – this is significantly more stringent requirement than the current OSHA requirements and was intended for clinical (vs. occupational) audiological testing. It will be very difficult for providers to comply with this requirement in a mobile testing environment. This is a very troubling NEW REQUIREMENT. This re-write is now requiring adherence to the much more stringent ANSI standard rather than the long-standing OSHA requirement that appears in WAC 296-62-09049 Appendix B, Table B-1. This ANSI standard was intended for clinical audiological testing. Companies using mobile testing equipment will not be able to comply with the ≤ 26dB requirement at 500 Hz. Recommend either a compromise maximum allowable SPL at 500 Hz of 30 dB, or simply retaining the OSHA requirement of 40 dB.

Department Response to Comment:

After review we have determined that the proposed standard is a significant increase in requirements. We will revise the proposal to retain the current requirements. A note will be added informing employers of the standard recommended by the AIHA and NHCA, which reviewers may want to have followed when feasible.

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Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-03035.
- In the first bullet, replaced the word "superaura" with "supra-aural".
- In the third bullet, modified the language to read,
 - "Check the functional operation of the audiometer each day before use by doing all of the following:
 - Make sure the audiometer's output is free from distorted or unwanted sound
 - Test either a person with known, stable hearing thresholds or a bioaccoustic simulator
 - Perform acoustic calibration for deviations of 10 dB or greater."
- Added a table relating to maximum ambient sound pressure levels.

NEW SECTION:

WAC 296-817-500, Options to audiometric testing – Summary. Reason for Adopting Rule:

• Created this table of contents/summary page relating to program assessment options. These options are new but not required.

Comment Received Relating to this Section:

The hearing protection audit will provide NO information about hearing loss prevention. It can only provide information regarding hearing protection use.

Department Response to Comment:

Hearing protection is a part of hearing loss prevention. The use of the audit is limited to cases where the required audiometric testing provides no significant information.

Comment Received Relating to this Section:

While it is recognized that this section provides some employers with additional methods to comply with the standard, it does constitute requirements which are not in the current standard. As such, great care must be taken to prevent this section from imposing new requirements on those employers not using these alternative methods, or confusion about any of the requirements in other sections of this standard.

Department Response to Comment:

This section is at the option of the employer. These are not requirements.

Comment Received Relating to this Section:

Recommend changing wording of last bullet point to read, "Employees who only work for short periods for any one employer can be monitored under the group program over a longer period of time increasing the likelihood of identifying early signs of Threshold shifts for those employees".

Department Response to Comment:

The proposed language is more direct for the intended audience, although the commenter has a valid point regarding the technical merits of these programs.

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Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-040.
- Changed all the WAC section numbers to reflect correct numbers.
- Added the word "for" after the word "exposures" in the "Your responsibility" section.
- Reformatted this section for clarity.
- Changed title of WAC 296-817-50015.

NEW SECTION:

WAC 296-817-50005, Conduct hearing protection audits at least quarterly. Reason for Adopting Rule:

• Created this section relating to conducting hearing protection audits. This option is new but not a requirement.

Comment Received Relating to this Section:

Please define "more often than quarterly"

Department Response to Comment:

The following bullet item provides this definition.

- If your business is mobile or involves variable processes auditing may need to be repeated more often than quarterly.

Changes to the Rule (Proposed rule versus rule actually adopted):

Proposed as WAC 296-817-04005.

NEW SECTION:

WAC 296-817-50010, Make sure staff conducting audits are properly trained. Reason for Adopting Rule:

• Created this section relating to training for conducting audits. This option is new but not a requirement.

Comment Received Relating to this Section: N/A

Department Response to Comment: N/A

Changes to the Rule (Proposed rule versus rule actually adopted):

• Proposed as WAC 296-817-04010.

NEW SECTION:

WAC 296-817-50015, Assess the hearing protection used by each employee during an audit. Reason for Adopting Rule:

• Created this section relating to assessment of hearing protection being used during an audit. This option is new but not a requirement.

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Comment Received Relating to this Section:

There is no indication of what you propose be done if the protection is not worn properly. Is this just merely a documentation exercise?

Department Response to Comment:

The follow-up requirements in WAC 296-817-20035 are required.

Comment Received Relating to this Section:

It is recommended that the allowance of Type 3 meters for jobsite audits. They are very cost effective and could assess whether conditions are consistent with conditions during noise monitoring.

Department Response to Comment:

It is not intended that noise monitoring be repeated during the audit, simply that the noise exposures be confirmed. A Type 3 meter would be adequate for this purpose.

Changes to the Rule (Proposed rule versus rule actually adopted):

• Proposed as WAC 296-817-04015.

NEW SECTION:

WAC 296-817-50020, Document your hearing protection audits. Reason for Adopting Rule:

• Created this section relating to documentation of audits. This option is new but not a requirement.

Comment Received Relating to this Section:

Add the following sub bullets:

- Include the following information in the record:
 - The NRR of the protector
 - Any information related to fitting/refitting the HPD

Department Response to Comment:

The NRR can be identified from the make and model of the hearing protector. It is not necessary for the hearing protection to be refitted during the audit.

Changes to the Rule (Proposed rule versus rule actually adopted):

• Proposed as WAC 296-817-04020.

NEW SECTION:

WAC 296-817-50025, Make sure third party hearing loss prevention programs meet the following requirements. Reason for Adopting Rule:

• Created this section relating to third party hearing loss prevention programs. This option is new but not a requirement.

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Comment Received Relating to this Section:

Revise the language to read, "Important:

Third-party hearing loss prevention programs are intended for short term employees hired or assigned to <u>duties having</u> noise <u>exposures</u> for less than one year and for seasonal employees. However, other employees may be included as long as you meet all requirements for hearing loss follow-ups and recordkeeping."

Department Response to Comment:

We agree with this suggestion.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-04025.
- Added the words "duties having" and "exposures" to the note.
- Reformatted this section for clarity

NEW SECTION:

WAC 296-817-600, Noise Definitions. Reason for Adopting Rule:

- The following definitions were incorporated into this section:
 - A-weighted
 - Audiogram
 - Audiologist
 - Baseline audiogram
 - Continuous noise
 - Criterion sound level
 - C-weighted
 - Decibel (dB)
 - Fast Response
 - Hertz (Hz)
 - Impulsive or impact noise
 - Noise dose
 - Noise dosimeter
 - Otolaryngologist
 - Qualified reviewer
 - Standard threshold shifts (STS)
 - Slow Response
 - Sound level
 - Sound level meter
 - TWA8 Equivalent 8-hour time weighted average sound level.

Comment Received Relating to this Section:

Modify the following definition to read, "**Audiologist** – A professional, specializing in the study and rehabilitation of hearing, who is certified by the American Speech, Hearing, & Language Association, <u>or the American Academy of Audiology, and is</u> licensed by the state board of examiners."

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Department Response to Comment:

We agree with this suggestion.

Comment Received Relating to this Section:

Modify the following definition to read, "**Baseline audiogram -** The audiogram against which future audiograms are compared. The baseline audiogram is collected when an employee is first assigned to work with noise exposure. The baseline <u>may be</u> revised if persistent hearing loss is found."

Department Response to Comment:

We agree with this suggestion. The language has been changed to reflect the specific direction in the standard.

Comment Received Relating to this Section:

Modify the following definition to read, "Continuous noise - Noise that is consistent with peaks spaced no more than one second apart. Continuous noise is measured using sound level meters and noise dosimeters with the slow response setting."

Department Response to Comment:

We agree with this suggestion.

Comment Received Relating to this Section:

Modify the following definition to read, "**Impulsive or impact noise -** Noise levels which involve maxima at intervals greater than one second. Where the intervals are less than one second, the noise levels must be considered continuous. Impulse and impact noise are measured using the fast response setting on a sound level meter."

Department Response to Comment:

We agree with this suggestion.

Comment Received Relating to this Section:

Add the following definition, "OHC – Occupational Hearing Conservationist – An audiometric technician certified by the Council for Accreditation in Occupational Hearing Conservation (CAOHC) and responsible to a Professional Supervisor."

Department Response to Comment:

These terms are not yet widely used at this time and have not been used in the rule.

Comment Received Relating to this Section:

Add the following definition, "Professional Supervisor – An audiologist, otolaryngologist, or other physician who supervises the audiometric testing conducted by the OHC, recommends follow-up procedures, manages the audiometric database, and determines the work relatedness of a worker's hearing loss."

Department Response to Comment:

These terms are not yet widely used at this time and have not been used in the rule.

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Comment Received Relating to this Section:

Define permanent and temporary standard threshold shifts.

Department Response to Comment:

We agree with this suggestion.

Changes to the Rule (Proposed rule versus rule actually adopted):

- Proposed as WAC 296-817-050.
- Modified language to the definition of "audiologist". It now reads, "A professional, specializing in the study and rehabilitation of hearing, who is certified by the American Speech, Hearing, and Language Association, or the American Academy of Audiology, and is licensed by the state board of examiners."
- Modified language to the definition of "baseline audiogram". It now reads, "The
 audiogram against which future audiograms are compared. The baseline audiogram is
 collected when an employee is first assigned to work with noise exposure. The baseline
 audiogram may be revised if persistent standard threshold shift or improvement is
 found."
- In the definition of "C-weighted", replaced the word "weight" with "represents".
- In the definition of "impulsive or impact noise", deleted the following sentence, "Where the intervals are less than one second, the noise levels must be considered continuous."
- Added a definition for "Occupational hearing loss". It reads, "A reduction in the ability of an individual to hear either caused or contributed to by exposure in the work environment"
- Added a definition for "Permanent threshold shift". It reads, "A hearing level change that has become persistent and is not expected to improve."
- Added a definition for "Temporary threshold shift". It reads, "A hearing level change that improves. A temporary threshold shift may occur with exposure to noise and hearing will return to normal within a few days. Temporary threshold shifts can be indicators of exposures that lead to permanent hearing loss."

ADDITIONAL COMMENTS:

Comment Received:

We are a volunteer fire district and cannot afford full time paid firefighters. To require hearing tests annually for a volunteer is not only logistically difficult but cost prohibited for us. Maybe volunteer firefighters could fit into your short-term employee category? Keep in mind that the majority of the fire service in Washington State is volunteer.

Department Response to Comment:

Volunteer firefighters are considered employees and generally serve terms of more than one year. However, fire departments may be able to work out arrangements with other employers of their firefighters under the third party program option.

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Comment Received:

It has been noted that there are instances of inconsistencies related to noise level criteria. At times the requirements indicate levels of "greater than 85 dBA TWA" or "above this level" and other times indicate "exposures may equal or exceed 85 dBA TWA" or "at or above 85dB TWA".

Department Response to Comment:

This will be made consistent.

Comment Received:

Understanding that WISHA is the first state to deviate from the federal OSH Act, has amongst the highest business density of compliance inspectors and has been a leader in writing their own safety standards for many years, I am disturbed as a safety professional the fact that for the last 30 years the Washington OSHA recordable rate has consistently been higher than the WISHA rate. In the 1990s, it has been at least 30 percent higher than the OSHA rate, and in 2001, the latest year that we have statistics, the WISHA recordable rate was 37 percent higher than the OSHA rate. In discussions with the University of Washington School of Environmental Health, anybody at WISHA that will listen, SHARP, there is no explanation as to why this occurs. There's not a particular business or segment or definition shift that has been responsible for this. It seems to me that much of what WISHA's focused has not been matters of consequence but rather those that are inconsequence and do not reduce accidents or mortality or morbidity.

Department Response to Comment:

Thank you for your comment.

Comment Received:

Perhaps the biggest change I see in this proposed standard is it does not address this concept of the 50 percent noise dose being the equivalent of an eight-hour TWA of 85 dBA as the current standard does. To illustrate this, last week I did noise dosimetry at an employer using 12-hour shifts. They exceed the 50 percent noise dose, yet 82.07 dBA. As I read the proposed standard, these employees with an 83 dBA, for example, would not be in the hearing preservation program but would currently be under the current hearing conservation program.

Department Response to Comment:

An 85 dBA TWA₈ exposure is the same as a 50 percent dose.